



UFP1610 THRU UFP1660

CURRENT 16.0 Amperes
VOLTAGE 50 to 600 Volts

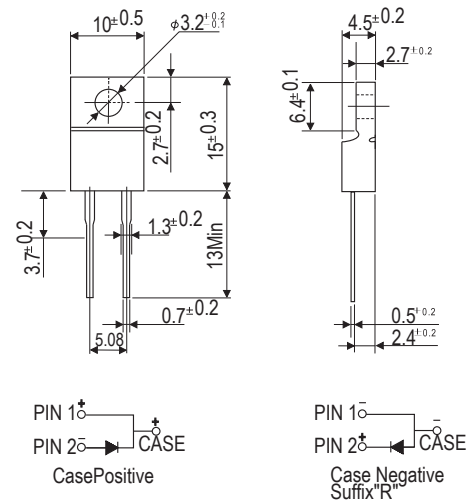
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability
- High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching
- Low leakage

Mechanical Data

- Case : JEDEC ITO-220A molded plastic body
- Terminals : Lead solderable per MIL-STD-750, method 2026
- Polarity : As marked
- Mounting Position : Any
- Weight : 0.08 ounce, 2.24 gram

ITO-220A



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	UFP 1610	UFP 1620	UFP 1630	UFP 1640	UFP 1650	UFP 1660	Units
Maximum recurrent peak reverse voltage	VRRM	50	100	200	300	400	600	Volts
Maximum RMS voltage	VRMS	35	70	140	210	280	420	Volts
Maximum DC blocking voltage	VDC	50	100	200	300	400	600	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length @ at TA=100 °C	I(AV)	16.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200						Amps
Maximum instantaneous forward voltage at 8.0A	VF	1.0				1.3	1.7	Volts
Maximum DC reverse current at rated DC blocking voltage TA=25 °C	IR	10.0						μA
Maximum DC reverse current at rated DC blocking voltage TA=125 °C		100						
Maximum reverse recovery time (Note 1)	Trr	50					80	ns
Typical junction capacitance (Note 2)	CJ	80					50	pF
Typical thermal resistance (Note 3)	RθJC	2.2						°C/W
Operating junction and storage temperature range	TJ TSTG	-55 to +150 -55 to +150						°C

Notes:

- (1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.
- (3) Thermal resistance from junction to case mounting on heatsink.

RATINGS AND CHARACTERISTIC CURVES UFP1610 THRU UFP1660

FIG. 1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

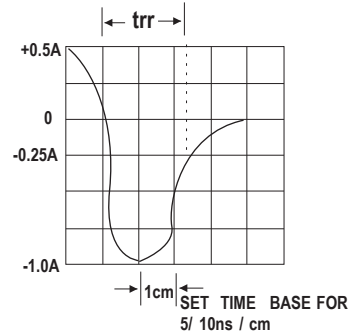
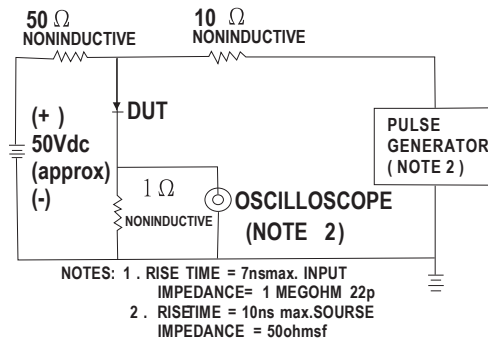


FIG. 2 - MAXIMUM AVERAGE FORWARD CURRENT DERATING

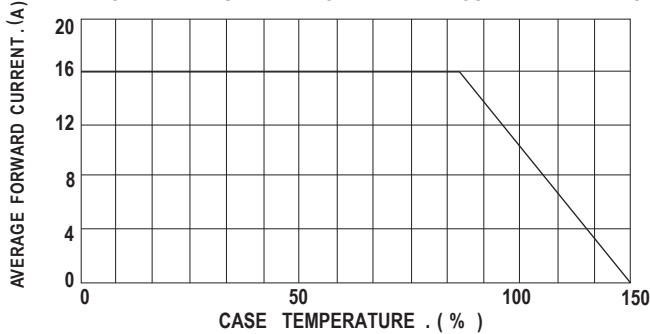


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

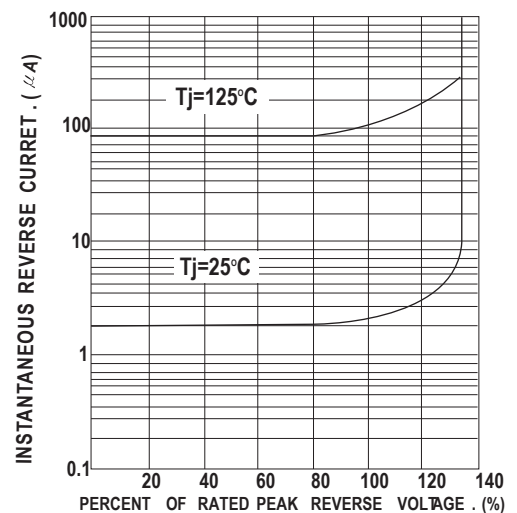


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

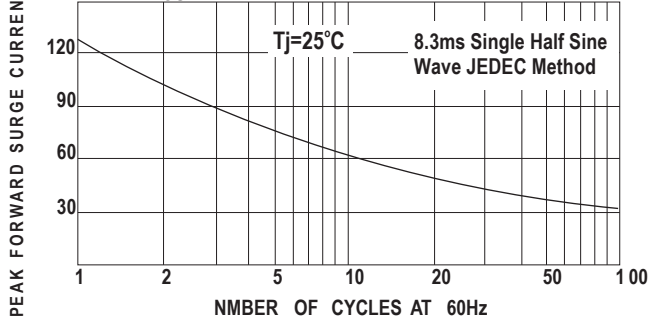


FIG. 6 - TYPICAL FORWARD CHARACTERISTICS

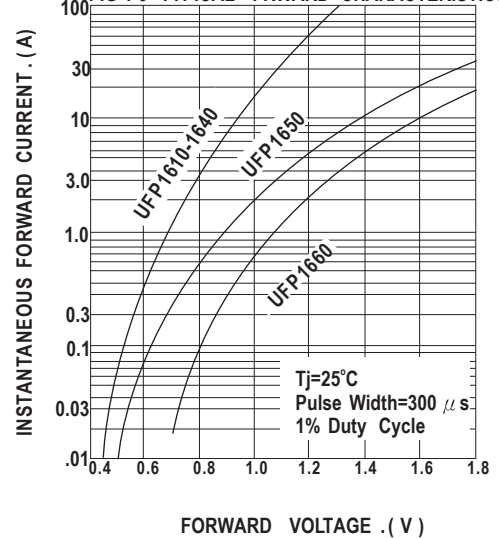


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

